

Appl. No. 10/590,736
Amdt. dated February 19, 2008
Reply to Office action of November 16, 2007

AMENDMENTS TO THE DRAWINGS

Please add the attached new sheet of drawings, including a new Fig. 8, illustrating the subject matter recited in claims 29-33.

Attachment: New sheet of drawings

REMARKS

Claims 14 and 17-33 are presently in the application. Claims 15 and 16 have been canceled.

The drawings have been objected to as failing to illustrate the subject matter of claims 29-33, namely, "at least one flux-conducting element is composed of what is by comparison a reduced number of laminations." This feature is described in applicants' specification at para. 26. A new sheet of drawings containing Fig. 8 is enclosed with this amendment. Fig. 8 is similar to Fig. 3, except that it shows at least one flux-conducting element 34 (upper left of Fig. 8) composed of only two laminations and a further flux-conducting element 34 (lower right of Fig. 8), which is mounted on a tooth head 23 located diametrically opposite the tooth head 23 that carries the flux-conducting element 34 having the reduced number of laminations, equipped with the same reduced number of laminations. This arrangement of flux-conducting elements provides the static imbalance compensation and the dynamic imbalance compensation described at para. 26 of applicants' specification. Since this structure was described in the original specification at para. 26, no new matter has been included in Fig. 8.

The specification has also been amended to refer to new Fig. 8.

Claims 14-16 and 18-28 have been rejected under 35 U.S.C. 102 as being anticipated by Nose (US 6,064,132). Reconsideration of the rejection is requested.

Claim 14 has been amended to include the language of dependent claim 16. Thus, claim 14 now requires linking holes 32 (Fig. 2) in the face ends of the tooth heads 23 and

axially protruding linking pins 35 (Fig. 6), which can be pressed into the linking holes, on the flux-conducting elements 34.

Nose teaches at least one partial laminating core 15 (Figs. 8 and 9) mounted on each of the axially pointing face ends of the tooth heads 13c. Nose also teaches that the partial pieces 15 are fixed on the tooth heads 13c by “a lamination calking” (col. 7, l. 8).

In rejecting claim 16, the examiner has determined that Fig. 9 of Nose teaches linking holes in the end faces of the tooth heads and axially protruding linking pins, which can be pressed into the linking holes, on the partial laminating core pieces 15.

A careful review of the reference reveals that no such teaching is found in Fig. 9 or anywhere else in Nose. Specifically, there is no teaching in Nose of pins provided on the partial laminating core pieces 15 which can be pressed into linking holes in the end faces of the tooth heads. To the contrary, Nose teaches that the partial pieces 15 are fixed on the tooth heads 13c by “a lamination calking.” One of ordinary skill in the art would have understood the language “lamination calking” to mean that the pieces 15 are attached to the tooth heads 13c by plastically deforming the material of the head 13c and/or the pieces 15. Thus, Nose clearly leads away from the use of applicants’ “pushbutton-like” connection in which no plastic reshaping of material takes place.

To support a rejection of a claim under 35 U.S.C. 102(b), it must be shown that each element of the claim is found, either expressly described or under principles of inherency, in a single prior art reference. See Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

Nose does not teach an armature of the type recited in claim 14 comprising linking holes in the face ends of the tooth heads and axially protruding linking pins, which can be pressed into the linking hole, on the flux-conducting elements. Accordingly, claim 14 and the claims dependent thereon are not anticipated by Nose.

Claim 17 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Nose in view of Gauthier et al (US Pub 2002/0163278). Reconsideration of the rejection is requested.

Gauthier et al does not teach the plurality of holes and pins recited in claim 17. Instead, Gauthier teaches at para. 26 that:

Each sector 120 is constituted by a stack of identical magnetic laminations that are superposed and clipped together so as to constitute a unitary assembly, with clipping being obtained using a conventional technique whereby each lamination is subjected to spot deformation at a plurality of assembly points 121.

Thus, like Nose, Gauthier et al teaches “spot deformation” of material in order to join the sectors 120 to one another and thus teaches away from applicants’ use of holes and pins.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974) and MPEP 2143.03. Neither Nose nor Gauthier et al teaches or suggests an armature of the type recited in claim 17 comprising two linking holes spaced apart from one another in the circumferential direction located in each end face of the tooth heads and two linking pins spaced equally apart in the circumferential direction located on each flux-conducting element. Accordingly, claim 17 is not rendered obvious by the combined teachings of Nose and Gauthier et al.

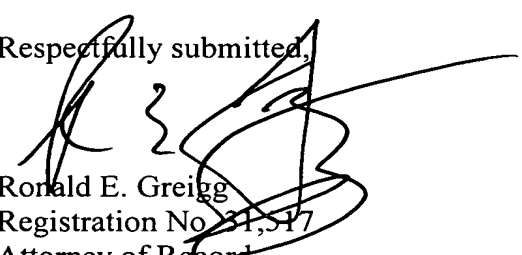
Claims 29-33 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Nose in view of Dyer et al (US 6,236,934). Reconsideration of the rejection is requested.

Dyer et al teaches a method and apparatus for balancing the spindle of a machine tool. See, col. 1, ll. 10-23. The described apparatus includes a plurality of peripherally placed magnetic circuits and a power driver which selectively interrupts the magnetic flux through the circuits, thereby moving unbalanced rotors in a desired manner to compensate for machine unbalance. See, Abstract.

Dyer et al does not teach anything with respect to the balancing of an armature for an electric motor and certainly does not teach or suggest an armature of the type recited in claims 29-33, wherein all the flux-conducting elements have the same number of laminations; and wherein at least one flux-conducting element is composed of what is by comparison a reduced number of laminations. Accordingly, even if it had been obvious to combine the teachings of Nose and Dyer et al as suggested by the examiner, one of ordinary skill in the art would not have arrived at the subject matter defined by claims 29-33.

Entry of the amendment and allowance of the claims are respectfully requested.

Respectfully submitted,



Ronald E. Greigg
Registration No. 31,517
Attorney of Record
CUSTOMER NO. 02119

GREIGG & GREIGG, P.L.L.C.
1423 Powhatan Street, Suite One
Alexandria, VA 22314
Tel. (703) 838-5500
REG/JFG/ncr
J:\Bosch\R307205\Reply to 11-16-07 OA.wpd